6 December 1972

MEMORANDUM FOR THE RECORD

SUBJECT: Improved Communications for CS Information Handling
Systems

1. In studying how the CS can better support its field
operations, one repeatedly gains the impression that computer
systems can assist in many ways. Basic advantages can be
realized when electrical communications are stored in the
computer. The most efficient way to accomplish this end is
by direct input to the computer from the machine language of
electrical communications. This capability is projected in
the cable dissemination system now under development. The
next step is to send electrically all our operational and
intel correspondence. A fundamental requirement to imple-
ment this innovation is the emplacement of equipment in the
field that will make unnecessary poking of messages by OC
personnel.

2. The Office of Communications has long recognized the
gains it could expect from eliminating or greatly reducing
the poking task and planners for the automated field termi-
nals (AFT) are investigating alternative means of input such
as optical character readers and various magnetic systems
using cards or tape. Although the CS will be a major bene-
ficiary from this effort, it has as yet, had little impact
on considerations affecting the form or functions of such
devices.

3. For its part the CS has been investigating how to
cope with a seemingly unrelated problem and has developed a
solution with an important bearing upon OC's work.

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the burden of typing

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or re-typing communications[   ]demanded relief.   **25X1**
One solution developed by TSD that may be applicable to the
"single poking" problem being examined by OC is a means of
recording typing on conventional tape cassettes and then
using the cassettes in an I/O device to re-create the typed
text.

   4.   TSD has developed a "clip-on" modification for the
selectric typewriter that makes possible tonal recording of
typing.   **25X1**

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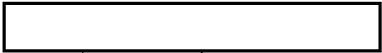   **25X1**

   5.   The selectric was chosen by TSD partly for techni-
cal reasons but largely because it was used throughout the
world and because it was reliable and maintainable through
locally available resources.   It is also widely used in our
Stations as well as at Headquarters.   Should TSD's technique
be adaptable to staff communications, the CS could adopt it
with relatively little extra expense and that primarily for
the device and suitable recorders.

   6.   The ability to go directly from the originating
typewriter to electrical communication without re-typing is
not free of penalties.   More "rough typing" would get through
to the addressee since corrections in the field would be ex-
pensive.   But this is likely to be the case anyway as the
number of field slots for typists decreases.   Reviewing of-
ficials would have to forego "literary" emendations, and
Headquarters would have to accept texts that "require some
work" before wide circulation.   But computer assisted type-
writers at Headquarters, such as already in use with the
Administrative Terminal System (ATS), will make such work
relatively simple and will obviate manual re-typing.   The

gain from the ability to get more of our correspondence transmitted electrically, securely and fast, and from the consequently increased effectiveness of our information processing systems will considerably outweigh the anticipated problems.

SA/IS

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